

AMENDMENTS TO THE SPECIFICATION:

Page 1, please replace the paragraph beginning at line 23, with the following amended paragraph:

--The present invention provides a radiating cable comprising a pair of insulated conductor wires, at least one cable segment having first ends connected to a load equal to a differential mode characteristic impedance of the cable segment, and second ends connected to a connector. This provides a cable of very great flexibility and compactness which can easily be fixed in the passages of a building by means of the usual techniques for fixing an ordinary telephone cable and which also presents impedance that is independent of length.--

Page 2, please replace the last paragraph beginning at line 28, with the following amended paragraph:

--In this preferred embodiment, both cable segments 1 are identical and each is made from a pair of solid copper conductors having a diameter of 1.38 millimeters (mm) and covered in insulation having a thickness of 2.2 mm of cellular polystyrene expanded by 41% and covered in a polyethylene skin having a thickness of 0.08 mm. The capacitance of the wire made in this way is 210 picofarads per meter (pF/m) and the insulation

has a dielectric constant of 1.463. A cable segment comprising a twisted pair of insulated conductors as described above then has a differential mode characteristic impedance of 100 ohms (Ω) so that when the wires are connected to 100 Ω load, the impedance of the cable segments is maintained at 100 Ω , regardless of its length. Two cable segments connected in parallel then have an equivalent impedance of 50 Ω corresponding to the nominal impedance normally required at the input/output (I/O) of a transceiver. The resulting cable is well-balanced, both for transmission and for reception, and when account is taken of its linear attenuation, each cable segment can be up to about 100 meters (m) long for transmission at 450 megahertz (MHz), about 75 m long for 900 MHz, about 45 m long for 1800 MHz, and about 35 m long for 2.4 GHz.--

Page 3, please replace the last paragraph beginning at line 14, with the following amended paragraph:

~~-----As shown in Figure 2, the insulated conductors are~~
held together by a dielectric tape 7 made of polyester, polypropylene, or more simply of paper, but preferably made of a material that enables the cable to withstand fire, such as a mineral tape of mica or of glass silk. In this embodiment, the dielectric tape 7 is covered in a series of helically-wound metal tapes 8, having edges that are spaced apart by gaps that are

preferably about one or two times the width of the metal tapes so that at high frequency the metal tape contributes to maintaining the differential mode characteristic impedance of the radiating cable at a value that is constant, while allowing radiated energy to escape through the gaps between the metal tapes 8. It is also possible to replace the metal tapes 8 by a plurality of metal wires wound around each of the insulated conductor wires.--

Page 4, please replace the last paragraph beginning at line 11, with the following amended paragraph:

--If the geometrical configuration of the premises to be covered is complex, it is also possible to envisage connecting more than two cable segments in parallel, with the differential mode characteristic impedance of each cable segment being selected so that the equivalent impedance of the radiating cable corresponds to the nominal impedance of the transceiver used.--
